

Abstract

This study aims to measure an efficiency of resources utilization in implementing green supply chain management (GSCM) strategy. Data Envelopment Analysis (DEA) technique was used to assess how firms transform resources (inputs) including 1) Cost for ISO 14000 per total expense 2) Frequency for auditing programs with supplier , to generate two efficient outputs, which are 1) Cost for energy consumption and 2) Cost for waste treatment. Nine firms in electronic parts/components manufacturing industry that have been implementing this strategy were selected as case examples. Results of actual operating data from those cases reveal that 5 firms are efficiently managing their resources to achieve expected benefits of GSCM strategy. On the other hand the remaining 4 firms did not utilized well resources GSCM implementation project. Not only does the DEA analysis identify the GSCM good practices among all firms, this technique also demonstrates causes of inefficiency for 4 inefficient firms that leads to determine opportunities for improvement.